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SHOW CHANGES MADE". No new matter has been added. Reconsideration of the pending claims is respectfully requested.

Amendments to the claims

Claims 10 and 11 are amended to overcome the rejections under 35 U.S.C. §112, first paragraph, and 35 U.S.C. §§102(b) and (e). No new matter has been added.

The 35 U.S.C. §112, second paragraph rejections

Claims 10 and 11 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. This rejection is respectfully traversed.

Claim 10 is clarified by being amended to indicate that the isolated antibody binds to a polypeptide encoded by an isolated DNA comprising SEQ ID No. 2, and to specify that the antibody is prepared against said polypeptide. Protein products of P2P cDNA are plural P2P proteins, defined at page 2, lines 6-8 of the specification. The specification also discloses that a single P2P cDNA was detected in murine tissues and in growing murine 3T3T mesenchymal stem

cells (page 4, first full paragraph). It is known in the art, however, that plural proteins can arise from a single gene through the processes of differential mRNA splicing or posttranslational modifications.

Claim 11 is clarified by amendment to recite "SEQ ID No. 1," as helpfully suggested by the Examiner.

Accordingly, Applicants respectfully request that the rejection of claims 10 and 11 under 35 U.S.C. §112, second paragraph, be withdrawn.

The 35 U.S.C. §112, first paragraph rejection

Claim 12 is rejected under 35 U.S.C §112, first paragraph, as not being enabled for the specific antibody C130; the specific hybridoma cell line required to practice claim 12 must be readily available to the public. This rejection is respectfully traversed.

A monoclonal antibody related to C130 is commercially available from Santa Cruz Biotechnology under the designation PACT (M56), as described in US Pat. No. 6,368,790 B1 (column 10, lines 50-52). Therefore, the required elements to practice claim 12 are

readily available to the public. Accordingly, Applicants respectfully request that the rejection of claim 12 under 35 U.S.C. §112, first paragraph, be withdrawn.

The 35 U.S.C. §102(b) rejection

Claims 10 and 11 are rejected under 35 U.S.C. §102(b) as being anticipated by either **Minoo** *et al. I* (Nov. 1989, *The Journal of Cell Biology*, Vol. 109, pages 1937-1946) or **Witte** *et al.* (1993, *Mol. Cell. Differ.* Vol. 2, pages 185-195). This rejection is respectfully traversed.

Claim 10 is amended to recite an isolated antibody that binds to a polypeptide encoded by an isolated DNA comprising SEQ ID No. 2, and that is prepared against said polypeptide. **Minoo** and **Witte** teach antibodies that bind to P2P protein, but which were prepared against proteins different from P2P. For example, antibody AC88 was prepared against the hsp90 protein; antibodies iD2 and fA12 were prepared against hnRNP core proteins (**Minoo**, page 1938). Such antibodies bind to P2P protein because P2P shares

epitopes in common with hsp90 and hnRNP core proteins, as described in the specification on page 3, in the second full paragraph.

Claim 11 is amended to recite an antibody of claim 10 that binds to the carboxy-terminal half of the polypeptide of SEQ ID No. 1. The antibody of claim 11 also binds specifically to the polypeptide of SEQ ID No. 1, which is not taught by either **Minoo** or **Witte**. Accordingly, Applicants respectfully request that the rejections of claims 10 and 11 under 35 U.S.C. §102(b) be withdrawn.

The 35 U.S.C. §102(e) rejection

Claims 10 and 11 are rejected under 35 U.S.C. §102(e) as being anticipated by US Pat. 5,643,761 (**Fisher** *et al.*). This rejection is respectfully traversed.

Applicants traverse this rejection for the same reasons as described above under §102(b), as **Fisher** only teaches an antibody that binds to P2P protein, but not an antibody that is prepared against a P2P protein. Accordingly, Applicants respectfully request that the rejection of claims 10 and 11 under 35 U.S.C. §102(e) be withdrawn.

This is intended to be a complete response to the Office Action mailed September 25, 2002. If any issues remain outstanding, the Examiner is respectfully requested to telephone the undersigned attorney of record for immediate resolution.

Respectfully submitted,

Date: Oct 31, 2002

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Counsel for Applicant

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The specification is amended by providing SEQ ID Nos. for the sequences in Figures 2 and 6, and at page 24, lines 4-6.

On page 4, line 10, after "Figure 6", please insert --(SEQ ID No. 2)--.

On page 7, line 24, after "amino acids", please insert --(SEQ ID No. 1)--.

On page 10, line 1, after "P2P cDNA", please insert --(SEQ ID No. 2)--.

On page 19, line 4, after "Figure 2", please insert --(SEQ ID No. 1)--.

On page 24, line 4, after "oligonuceotide", please insert --(SEQ ID No. 3)--.

On page 24, line 5, after "oligonucleotide", please insert --(SEQ ID No. 4)--.

On page 2, please replace the paragraph beginning on line 3 with the following rewritten paragraph:

P2Ps, i.e. proliferation potential proteins, comprise a group of highly basic 35-40 kDa nuclear proteins that can bind to

RNA and are associated with hnRNP particles as determined by sucrose gradient sedimentation of nuclear components (7). ~~In this application, references to a singular P2P protein encompass the plural P2P "proteins", and vice versa.~~ Antibodies prepared against core hnRNPs recognize P2Ps and 2D gel electrophoresis established that P2Ps are members of the A/B class of hnRNP proteins which are involved in RNA processing (7, 9).

IN THE CLAIMS:

Please amend claim 10 to read as follows:

10. (amended) An isolated antibody which binds to ~~protein products of P2P cDNA~~ a polypeptide encoded by an isolated DNA comprising SEQ ID No. 2, wherein the antibody is prepared against said polypeptide.

Please amend claim 11 to read as follows:

11. (amended) The isolated antibody of claim 10 which binds to the carboxy-terminal half of the polypeptide ~~shown in Figure 2~~ of SEQ ID No 1.

1642

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Scott et al.

FILED: March 16, 2001

SERIAL NO.: 09/877,381

FOR: cDNA Encoding P2P Proteins and Uses Of P2P cDNA Derived Antibodies And Antisense Reagents in Determining The Proliferative Potential of Normal, Abnormal, and Cancer Cells in Animals And Humans

ART UNIT: 1642

EXAMINER: Yu, Misook.

DOCKET: D6386/D

The Honorable Commissioner of Patents
BOX NON-FEE AMENDMENT
Washington, DC 20231

CERTIFICATE OF MAILING UNDER 37 C.F.R. 1.8

Dear Sir:

I hereby certify under 37 CFR 1.8 that the following correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to Honorable Commissioner for Patents, Box Non-Fee Amendment, Washington DC 20231.

(1) Response to Office Action; (10 pages)
(2) Return Postcard.

Please return the enclosed postcard acknowledging receipt of this correspondence.

Respectfully submitted,

Date: Oct 31, 2002

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